AUTHOR INDEX

ABE O. *see* YAMADA T., ABE O., KOBAYASHI T. & SUGI H. Myofilament sliding per ATP molecule in rabbit muscle fibres studied using laser flash photolysis of caged ATP. 229

ADAMSON R.H. & MICHEL C.C. Pathways through the intercellular clefts of frog mesenteric capillaries. With an Appendix by K.H. PARKER, C.G. PHILLIPS & W. WANG. 303

ALLEN David G. *see* WESTERBLAD Håkan & ALLEN David G. The influence of intracellular pH on contraction, relaxation and $[Ca^{2+}]_i$ in intact single fibres from mouse muscle. 611

ALLEN T.G.J. & BROWN D.A. M_2 muscarinic receptor-mediated inhibition of the Ca^{2+} current in rat magnocellular cholinergic basal forebrain neurones. 173

AL-OBAIDI M. *see* KARIM F. & AL-OBAIDI M. Modification of carotid chemoreceptor-induced changes in renal haemodynamics and function by carotid baroreflex in dogs. 599

ATTWELL David *see* BARBOUR Boris, MAGNUS Chris, SZATKOWSKI Marek, GRAY Peter T.A. & ATTWELL David Changes in NAD(P)H fluorescence and membrane current produced by glutamate uptake into salamander Müller cells. 573

AUSTIN Clare & WRAY Susan Extracellular pH signals affect rat vascular tone by rapid transduction into intracellular pH changes. 1

BARBOUR Boris, MAGNUS Chris, SZATKOWSKI Marek, GRAY Peter T.A. & ATTWELL David Changes in NAD(P)H fluorescence and membrane current produced by glutamate uptake into salamander Müller cells. 573

BATES Susan E. & GURNEY Alison M. Ca^{2+}-dependent block and potentiation of L-type calcium current in guinea-pig ventricular myocytes. 345

BECHEM M. *see* KALTHOF B., BECHEM M., FLOCKE K., POTT L. & SCHRAMM M. Kinetics of ATP-induced Ca^{2+} transients in cultured pig aortic smooth muscle cells depend on ATP concentration and stored Ca^{2+}. 245

BEN-ARI Y. *see* CRÉPEL V., KRNJEVIĆ K. & BEN-ARI Y. Sulphonylureas reduce the slowly inactivating D-type outward current in rat hippocampal neurons. 39

BERARDELLI A. *see* INGHILLERI M., BERARDELLI A., CRUCCU G. & MANFREDI M. Silent period evoked by transcranial stimulation of the human cortex and cervicomedullary junction. 521

BROWN D.A. *see* ALLEN T.G.J. & BROWN D.A. M_2 muscarinic receptor-mediated inhibition of the Ca^{2+} current in rat magnocellular cholinergic basal forebrain neurones. 173

CANNON Stephen C. & COREY David P. Loss of Na^+ channel inactivation by anemone toxin (ATX II) mimics the myotonic state in hyperkalaemic periodic paralysis. 501

CAPUTO C. *see* EDMAN K.A.P., CAPUTO C. & LOU F. Depression of tetanic force induced by loaded shortening of frog muscle fibres. 535

CLARK J.F., KHUCHUA Z., KUZNETSOV A., SAKS V.A. & VENTURA-CLAPIER R. Compartmentation of creatine kinase isoenzymes in myometrium of gravid guinea-pig. 553

CONIGLIO Lisa M., HARDWICK Jean C. & PARSONS Rodney L. Quantal transmitter release at snake twitch and tonic muscle fibres during prolonged nerve terminal depolarization. 383

CONIGLIO Lisa M., HENDRICKS Gregory M. & PARSONS Rodney L. Effects of lanthanum at snake twitch and tonic muscle fibre endplates. 405

COREY David P. *see* CANNON Stephen C. & COREY David P. Loss of Na^+ channel inactivation by anemone toxin (ATX II) mimics the myotonic state in hyperkalaemic periodic paralysis. 501

CRÉPEL V., KRNJEVIĆ K. & BEN-ARI Y. Sulphonylureas reduce the slowly inactivating D-type outward current in rat hippocampal neurons. 39

CRUCCU G. *see* INGHILLERI M., BERARDELLI A., CRUCCU G. & MANFREDI M. Silent period evoked by transcranial stimulation of the human cortex and cervicomedullary junction. 521

DEMAUREX Nicolas, GRINSTEIN Sergio, JACONI Marisa, SCHLEGEL Werner, LEW Daniel P. & KRAUSE Karl-Heinz Proton currents in human granulocytes: regulation by membrane potential and intracellular pH. 329

DOERING A.E. & LEDERER W.J. The mechanism by which cytoplasmic protons inhibit the sodium–calcium exchanger in guinea-pig heart cells. 481

EDMAN K.A.P., CAPUTO C. & LOU F. Depression of tetanic force induced by loaded shortening of frog muscle fibres. 535

ELMSLIE Keith S. *see* VAN LUNTEREN Erik, ELMSLIE Keith S. & JONES Stephen W. Effects of temperature on calcium current of bullfrog sympathetic neurons. 81

ENGBERG I. *see* NEDERGAARD S., FLATMAN J.A. & ENGBERG I. Nifedipine- and ω-conotoxin-sensitive Ca^{2+} conductances in guinea-pig substantia nigra pars compacta neurones. 727

FAN Zheng *see* FURUKAWA Tetsushi, FAN Zheng, SAWANOBORI Tohru & HIRAOKA Masayasu Modification of adenosine 5′-triphosphate-sensitive K^+ channel by trypsin in guinea-pig ventricular myocytes. 707

FLATMAN J.A. *see* NEDERGAARD S., FLATMAN J.A. & ENGBERG I. Nifedipine- and ω-conotoxin-sensitive Ca^{2+} conductances in guinea-pig substantia nigra pars compacta neurones. 727

FLOCKE K. *see* KALTHOF B., BECHEM M., FLOCKE K., POTT L. & SCHRAMM M. Kinetics of ATP-induced Ca^{2+} transients in cultured pig aortic smooth muscle cells depend on ATP concentration and stored Ca^{2+}. 245

FURUKAWA Tetsushi, FAN Zheng, SAWANOBORI Tohru & HIRAOKA Masayasu Modification of adenosine 5′-triphosphate-sensitive K^+ channel by trypsin in guinea-pig ventricular myocytes. 707

GINIATULLIN R.A., KHAZIPOV R.N. & VYSKOČIL F. A correlation between quantal content and decay time of endplate currents in frog muscles with intact cholinesterase. 95

GINIATULLIN R.A., KHAZIPOV R.N., ORANSKA T.I., NIKOLSKY E.E., VORONIN V.A. & VYSKOČIL F. The effect of non-quantal actylcholine release on quantal miniature currents at mouse diaphragm. 105

GRAY Peter T.A. *see* BARBOUR Boris, MAGNUS Chris, SZATKOWSKI Marek, GRAY Peter T.A. & ATTWELL David Changes in NAD(P)H fluorescence and membrane current produced by glutamate uptake into salamander Müller cells. 573

GRINSTEIN Sergio *see* DEMAUREX Nicolas, GRINSTEIN Sergio, JACONI Marisa, SCHLEGEL Werner, LEW Daniel P. & KRAUSE Karl-Heinz Proton currents in human granulocytes: regulation by membrane potential and intracellular pH. 329

GURNEY Alison M. *see* BATES Susan E. & GURNEY Alison M. Ca^{2+}-dependent block and potentiation of L-type calcium current in guinea-pig ventricular myocytes. 345

HARDWICK Jean C. *see* CONIGLIO Lisa M., HARDWICK Jean C. & PARSONS Rodney L. Quantal transmitter release at snake twitch and tonic muscle fibres during prolonged nerve terminal depolarization. 383

HENDRICKS Gregory M. *see* CONIGLIO Lisa M., HENDRICKS Gregory M. & PARSONS Rodney L. Effects of lanthanum at snake twitch and tonic muscle fibre endplates. 405

HENRY G.H. *see* MICHALSKI A., WIMBORNE B.M. & HENRY G.H. The effect of reversible cooling of cat's primary visual cortex on the responses of area 21a neurons. 133

HESS Peter *see* KUO Chung-Chin & HESS Peter Ion permeation through the L-type Ca^{2+} channel in rat phaeochromocytoma cells: two sets of ion binding sites in the pore. 629

HESS Peter *see* KUO Chung-Chin & HESS Peter Characterization of the high-affinity Ca^{2+} binding sites in the L-type Ca^{2+} channel pore in rat phaeochromocytoma cells. 657

HESS Peter *see* KUO Chung-Chin & HESS Peter Block of the L-type Ca^{2+} channel pore by external and internal Mg^{2+} in rat phaeochromocytoma cells. 683

HILAIRE Gérard, MORIN Didier, LAJARD Anne-Marie & MONTEAU Roger Changes in serotonin metabolism may elicit obstructive apnoea in the newborn rat. 367

HIRAOKA Masayasu *see* FURUKAWA Tetsushi, FAN Zheng, SAWANOBORI Tohru & HIRAOKA Masayasu Modification of adenosine 5′-triphosphate-sensitive K^+ channel by trypsin in guinea-pig ventricular myocytes. 707

HUGHES Bret A. & SEGAWA Yasunori cAMP-activated chloride currents in amphibian retinal pigment epithelial cells. 749

INGHILLERI M., BERARDELLI A., CRUCCU G. & MANFREDI M. Silent period evoked by transcranial stimulation of the human cortex and cervicomedullary junction. 521

ISENBERG Gerrit *see* WELLNER Marie-Cécile & ISENBERG Gerrit Properties of stretch-activated channels in myocytes from the guinea-pig urinary bladder. 213

JACONI Marisa *see* DEMAUREX Nicolas, GRINSTEIN Sergio, JACONI Marisa, SCHLEGEL Werner, LEW Daniel P. & KRAUSE Karl-Heinz Proton currents in human granulocytes: regulation by membrane potential and intracellular pH. 329

JANKOWSKA E., RIDDELL J.S. & MCCREA D.A. Primary afferent depolarization of myelinated fibres in the joint and interosseous nerves of the cat. 115

JONES Stephen W. *see* VAN LUNTEREN Erik, ELMSLIE Keith S. & JONES Stephen W. Effects of temperature on calcium current of bullfrog sympathetic neurons. 81

KALTHOF B., BECHEM M., FLOCKE K., POTT L. & SCHRAMM M. Kinetics of ATP-induced Ca^{2+} transients in cultured pig aortic smooth muscle cells depend on ATP concentration and stored Ca^{2+}. 245

KANEKO Akimichi *see* KURAJASHI Takashi & KANEKO Akimichi Gating properties of the cAMP-gated channel in toad olfactory receptor cells. 287

KARIM F. & AL-OBAIDI M. Modification of carotid chemoreceptor-induced changes in renal haemodynamics and function by carotid baroreflex in dogs. 599

KHAZIPOV R.N. *see* GINIATULLIN R.A., KHAZIPOV R.N. & VYSKOČIL F. A correlation between quantal content and decay time of endplate currents in frog muscles with intact cholinesterase. 95

KHAZIPOV R.N. *see* GINIATULLIN R.A., KHAZIPOV R.N., ORANSKA T.I., NIKOLSKY E.E., VORONIN V.A. & VYSKOČIL F. The effect of non-quantal actylcholine release on quantal miniature currents at mouse diaphragm. 105

KHORANA H. Gobind *see* KNOX Barry E., KHORANA H. Gobind & NASI Enrico Light-induced currents in *Xenopus* oocytes expressing bovine rhodopsin. 157

KHUCHUA Z. *see* CLARK J.F., KHUCHUA Z., KUZNETSOV A., SAKS V.A. & VENTURA-CLAPIER R. Compartmentation of creatine kinase isoenzymes in myometrium of gravid guinea-pig. 553

KNOX Barry E., KHORANA H. Gobind & NASI Enrico Light-induced currents in *Xenopus* oocytes expressing bovine rhodopsin. 157

KOBAYASHI T. *see* YAMADA T., ABE O., KOBAYASHI T. & SUGI H. Myofilament sliding per ATP molecule in rabbit muscle fibres studied using laser flash photolysis of caged ATP. 229

KRAUSE Karl-Heinz *see* DEMAUREX Nicolas, GRINSTEIN Sergio, JACONI Marisa, SCHLEGEL Werner, LEW Daniel P. & KRAUSE Karl-Heinz Proton currents in human granulocytes: regulation by membrane potential and intracellular pH. 329

KRNJEVIĆ K. *see* CRÉPEL V., KRNJEVIĆ K. & BEN-ARI Y. Sulphonylureas reduce the slowly inactivating D-type outward current in rat hippocampal neurons. 39

KUO Chung-Chin & HESS Peter Ion permeation through the L-type Ca^{2+} channel in rat phaeochromocytoma cells: two sets of ion binding sites in the pore. 629

KUO Chung-Chin & HESS Peter Characterization of the high-affinity Ca^{2+} binding sites in the L-type Ca^{2+} channel pore in rat phaeochromocytoma cells. 657

KUO Chung-Chin & HESS Peter Block of the L-type Ca^{2+} channel pore by external and internal Mg^{2+} in rat phaeochromocytoma cells. 683

KURAHASHI Takashi & KANEKO Akimichi Gating properties of the cAMP-gated channel in toad olfactory receptor cells. 287

KUZNETSOV A. *see* CLARK J.F., KHUCHUA Z., KUZNETSOV A., SAKS V.A. & VENTURA-CLAPIER R. Compartmentation of creatine kinase isoenzymes in myometrium of gravid guinea-pig. 553

LAJARD Anne-Marie *see* HILAIRE Gérard, MORIN Didier, LAJARD Anne-Marie & MONTEAU Roger Changes in serotonin metabolism may elicit obstructive apnoea in the newborn rat. 367

LEDERER W.J. *see* DOERING A.E. & LEDERER W.J. The mechanism by which cytoplasmic protons inhibit the sodium–calcium exchanger in guinea-pig heart cells. 481

LEW Daniel P. *see* DEMAUREX Nicolas, GRINSTEIN Sergio, JACONI Marisa, SCHLEGEL Werner, LEW Daniel P. & KRAUSE Karl-Heinz Proton currents in human granulocytes: regulation by membrane potential and intracellular pH. 329

LIPSIUS Stephen L. *see* ZHOU Zhengfeng & LIPSIUS Stephen L. Na^+–Ca^{2+} exchange current in latent pacemaker cells isolated from cat right atrium. 263

LOU F. *see* EDMAN K.A.P., CAPUTO C. & LOU F. Depression of tetanic force induced by loaded shortening of frog muscle fibres. 535

MCCREA D.A. *see* JANKOWSKA E., RIDDELL J.S. & MCCREA D.A. Primary afferent depolarization of myelinated fibres in the joint and interosseous nerves of the cat. 115

MCNAUGHTON P.A. *see* PERRY R.J. & MCNAUGHTON P.A. The mechanism of ion transport by the Na^+–Ca^{2+}, K^+ exchange in rods isolated from the salamander retina. 443

MAGNUS Chris *see* BARBOUR Boris, MAGNUS Chris, SZATKOWSKI Marek, GRAY Peter T.A. & ATTWELL David Changes in NAD(P)H fluorescence and membrane current produced by glutamate uptake into salamander Müller cells. 573

MANFREDI M. *see* INGHILLERI M., BERARDELLI A., CRUCCU G. & MANFREDI M. Silent period evoked by transcranial stimulation of the human cortex and cervicomedullary junction. 521

MICHALSKI A., WIMBORNE B.M. & HENRY G.H. The effect of reversible cooling of cat's primary visual cortex on the responses of area 21a neurons. 133

MICHEL C.C. *see* ADAMSON R.H. & MICHEL C.C. Pathways through the intercellular clefts of frog mesenteric capillaries. With an Appendix by K.H. PARKER, C.G. PHILLIPS & W. WANG. 303

MONTEAU Roger *see* HILAIRE Gérard, MORIN Didier, LAJARD Anne-Marie & MONTEAU Roger Changes in serotonin metabolism may elicit obstructive apnoea in the newborn rat. 367

MORIN Didier *see* HILAIRE Gérard, MORIN Didier, LAJARD Anne-Marie & MONTEAU Roger Changes in serotonin metabolism may elicit obstructive apnoea in the newborn rat. 367

NASI Enrico *see* KNOX Barry E., KHORANA H. Gobind & NASI Enrico Light-induced currents in *Xenopus* oocytes expressing bovine rhodopsin. 157

NEDERGAARD S., FLATMAN J.A. & ENGBERG I. Nifedipine- and ω-conotoxin-sensitive Ca^{2+} conductances in guinea-pig substantia nigra pars compacta neurones. 727

NIKOLSKY E.E. *see* GINIATULLIN R.A., KHAZIPOV R.N., ORANSKA T.I., NIKOLSKY E.E., VORONIN V.A. & VYSKOČIL F. The effect of non-quantal actylcholine release on quantal miniature currents at mouse diaphragm. 105

OGATA Nobukuni & TATEBAYASHI Hideharu Kinetic analysis of two types of Na^+ channels in rat dorsal root ganglia. 9

ORANSKA T.I. *see* GINIATULLIN R.A., KHAZIPOV R.N., ORANSKA T.I., NIKOLSKY E.E., VORONIN V.A. & VYSKOČIL F. The effect of non-quantal actylcholine release on quantal miniature currents at mouse diaphragm. 105

PARKER K.H., PHILLIPS C.G. & WANG W. Appendix to 'Pathways through the intercellular clefts of frog mesenteric capillaries' by R.H. ADAMSON & C.C. MICHEL. 322

PARSONS Rodney L. *see* CONIGLIO Lisa M., HARDWICK Jean C. & PARSONS Rodney L. Quantal transmitter release at snake twitch and tonic muscle fibres during prolonged nerve terminal depolarization. 383

PARSONS Rodney L. *see* CONIGLIO Lisa M., HENDRICKS Gregory M. & PARSONS Rodney L. Effects of lanthanum at snake twitch and tonic muscle fibre endplates. 405

PERRY R.J. & MCNAUGHTON P.A. The mechanism of ion transport by the Na^+–Ca^{2+}, K^+ exchange in rods isolated from the salamander retina. 443

PHILLIPS C.G. *see* PARKER K.H., PHILLIPS C.G. & WANG W. Appendix to 'Pathways through the intercellular clefts of frog mesenteric capillaries' by R.H. ADAMSON & C.C. MICHEL. 322

POTT L. *see* KALTHOF B., BECHEM M., FLOCKE K., POTT L. & SCHRAMM M. Kinetics of ATP-induced Ca^{2+} transients in cultured pig aortic smooth muscle cells depend on ATP concentration and stored Ca^{2+}. 245

RIBCHESTER Richard R. Co-existence and elimination of convergent motor nerve terminals in reinnervated and paralysed adult rat skeletal muscle. 421

RIDDELL J.S. *see* JANKOWSKA E., RIDDELL J.S. & MCCREA D.A. Primary afferent depolarization of myelinated fibres in the joint and interosseous nerves of the cat. 115

SAKS V.A. *see* CLARK J.F., KHUCHUA Z., KUZNETSOV A., SAKS V.A. & VENTURA-CLAPIER R. Compartmentation of creatine kinase isoenzymes in myometrium of gravid guinea-pig. 553

SAWANOBORI Tohru *see* FURUKAWA Tetsushi, FAN Zheng, SAWANOBORI Tohru & HIRAOKA Masayasu Modification of adenosine 5′-triphosphate-sensitive K^+ channel by trypsin in guinea-pig ventricular myocytes. 707

SCHLEGEL Werner *see* DEMAUREX Nicolas, GRINSTEIN Sergio, JACONI Marisa, SCHLEGEL Werner, LEW Daniel P. & KRAUSE Karl-Heinz Proton currents in human granulocytes: regulation by membrane potential and intracellular pH. 329

SCHOMBURG E.D. *see* STEFFENS H. & SCHOMBURG E.D. Convergence in segmental reflex pathways from nociceptive and non-nociceptive afferents to α-motoneurones in the cat. 191

SCHRAMM M. *see* KALTHOF B., BECHEM M., FLOCKE K., POTT L. & SCHRAMM M. Kinetics of ATP-induced Ca^{2+} transients in cultured pig aortic smooth muscle cells depend on ATP concentration and stored Ca^{2+}. 245

SEGAWA Yasunori *see* HUGHES Bret A. & SEGAWA Yasunori cAMP-activated chloride currents in amphibian retinal pigment epithelial cells. 749

STEFFENS H. & SCHOMBURG E.D. Convergence in segmental reflex pathways from nociceptive and non-nociceptive afferents to α-motoneurones in the cat. 191

SUGI H. *see* YAMADA T., ABE O., KOBAYASHI T. & SUGI H. Myofilament sliding per ATP molecule in rabbit muscle fibres studied using laser flash photolysis of caged ATP. 229

SZATKOWSKI Marek *see* BARBOUR Boris, MAGNUS Chris, SZATKOWSKI Marek, GRAY Peter T.A. & ATTWELL David Changes in NAD(P)H fluorescence and membrane current produced by glutamate uptake into salamander Müller cells. 573

TATEBAYASHI Hideharu *see* OGATA Nobukuni & TATEBAYASHI Hideharu Kinetic analysis of two types of Na^+ channels in rat dorsal root ganglia. 9

VAN LUNTEREN Erik, ELMSLIE Keith S. & JONES Stephen W. Effects of temperature on calcium current of bullfrog sympathetic neurons. 81

VENTURA-CLAPIER R. *see* CLARK J.F., KHUCHUA Z., KUZNETSOV A., SAKS V.A. & VENTURA-CLAPIER R. Compartmentation of creatine kinase isoenzymes in myometrium of gravid guinea-pig. 553

VORONIN V.A. *see* GINIATULLIN R.A., KHAZIPOV R.N., ORANSKA T.I., NIKOLSKY E.E., VORONIN V.A. & VYSKOČIL F. The effect of non-quantal actylcholine release on quantal miniature currents at mouse diaphragm. 105

VYSKOČIL F. *see* GINIATULLIN R.A., KHAZIPOV R.N. & VYSKOČIL F. A correlation between quantal content and decay time of endplate currents in frog muscles with intact cholinesterase. 95

VYSKOČIL F. *see* GINIATULLIN R.A., KHAZIPOV R.N., ORANSKA T.I., NIKOLSKY E.E., VORONIN V.A. & VYSKOČIL F. The effect of non-quantal actylcholine release on quantal miniature currents at mouse diaphragm. 105

WANG W. *see* PARKER K.H., PHILLIPS C.G. & WANG W. Appendix to 'Pathways through the intercellular clefts of frog mesenteric capillaries' by R.H. ADAMSON & C.C. MICHEL. 322

WATANABE Akira Polarity reversal of the optical rotation signals with change in direction of impulse conduction along the lobster nerve. 55

WELLNER Marie-Cécile & ISENBERG Gerrit Properties of stretch-activated channels in myocytes from the guinea-pig urinary bladder. 213

WESTERBLAD Håkan & ALLEN David G. The influence of intracellular pH on contraction, relaxation and $[Ca^{2+}]_i$ in intact single fibres from mouse muscle. 611

WIMBORNE B.M. *see* MICHALSKI A., WIMBORNE B.M. & HENRY G.H. The effect of reversible cooling of cat's primary visual cortex on the responses of area 21a neurons. 133

WRAY Susan *see* AUSTIN Clare & WRAY Susan Extracellular pH signals affect rat vascular tone by rapid transduction into intracellular pH changes. 1

YAMADA T., ABE O., KOBAYASHI T. & SUGI H. Myofilament sliding per ATP molecule in rabbit muscle fibres studied using laser flash photolysis of caged ATP. 229

ZHOU Zhengfeng & LIPSIUS Stephen L. Na^+–Ca^{2+} exchange current in latent pacemaker cells isolated from cat right atrium. 263